

IN THE CLAIMS:

Please amend the claims to read as follows.

1. (Currently Amended) A myocardial revascularization catheter comprising:
 an outer shaft having a lumen, an inner surface, a first stop, a second stop, and a distal end; and
 an inner shaft having a distal end, an outside surface, and a first ~~stop~~ eatck,
 the inner shaft being slidably and rotatably disposed in the outer shaft,
 the inner shaft having a piercing tip,
 the piercing tip moveable from a first position to a second position,
 the first position outside of the outer shaft,
 the second position outside of the outer shaft,
 the ~~eatck~~ first stop of the inner shaft being arrested by the first stop of the outer shaft from further purely longitudinal movement towards the distal end of the outer shaft when the piercing tip is in the first position,
 the ~~eatck~~ first stop of the inner shaft being arrested by the second stop of the outer shaft from further purely longitudinal movement towards the distal end of the outer shaft when the piercing tip is in the second position,
 wherein rotation of the inner shaft allows for distal movement of the ~~eatck~~ first stop of the inner shaft past the first stop of the outer shaft and towards the distal end of the outer shaft.
2. (Currently Amended) The myocardial revascularization catheter of claim 1 wherein rotation of the inner shaft allows for distal movement of the ~~eatck~~ first stop of the inner shaft past the second stop of the outer shaft and towards the distal end of the outer shaft.
3. (Original) The myocardial revascularization catheter of claim 1 wherein the outer shaft has a first injection port.

Please cancel claim 4-14 without prejudice.

4.-14. (Canceled)

15. (Canceled)

16. (Previously Presented) The myocardial revascularization catheter of claim 1 wherein at least one of the stops comprises a radiopaque material.

17. (Currently Amended) The myocardial revascularization catheter of claim 1 wherein the first stop, the second stop, a third stop positioned within the outer shaft, and the ~~each~~ first stop of the inner shaft comprise a radiopaque material.
18. (Previously Presented) The myocardial revascularization catheter of claim 1 wherein at least one of the stops is in the shape of a semi-circle.
19. (Previously Presented) The myocardial revascularization catheter of claim 1 wherein the outer shaft has an atraumatic flange.
20. (Previously Presented) The myocardial revascularization catheter of claim 1 wherein at least one of the stops is in the shape of a sector of a circle.
21. (Previously Presented) The myocardial revascularization catheter of claim 20 wherein the sector defines a ninety degree angle.
22. (Currently Amended) The myocardial revascularization catheter of claim 1 wherein the first stop and the second stop of the outer shaft oppose one another within the outer shaft.
23. (Currently Amended) The myocardial revascularization catheter of claim 1 wherein the rotation of the inner shaft must exceed ninety degrees in order for the ~~each~~ first stop of the inner shaft to move past the first stop of the outer shaft towards the second stop of the outer shaft.
24. (Currently Amended) The myocardial revascularization catheter of claim 1 wherein the rotation of the inner shaft must exceed one hundred and eighty degrees in order for the ~~each~~ first stop of the inner shaft to move past the first stop of the outer shaft towards the second stop of the outer shaft.
25. (Currently Amended) The myocardial revascularization catheter of claim 1 further comprising:
a third stop in the outer shaft,
the stops being uniformly spaced within the outer shaft.
26. (Currently Amended) A method of performing a medical procedure comprising:
providing a catheter having
an outer shaft having a lumen, an inner surface, a first stop, a second stop, and a distal end; and

an inner shaft having a distal end, an outside surface, and a first stop,
the inner shaft being slidably and rotatably disposed in the outer shaft,
the inner shaft having a piercing tip, the piercing tip moveable from a first
position to a second position, the first position outside of the outer shaft, the second position
outside of the outer shaft,

the stop of the inner shaft being arrested by the first stop of the outer shaft
from further purely longitudinal movement towards the distal end of the outer shaft when the
piercing tip is in the first position,

the stop of the inner shaft being arrested by the second stop of the outer
shaft from further purely longitudinal movement towards the distal end of the outer shaft when
the piercing tip is in the second position,

wherein rotation of the inner shaft allows for distal movement of the stop
of the inner shaft past the first stop of the outer shaft and towards the distal end of the outer shaft;

steering the catheter of claim 1 to a target site in the body of a patient;

viewing radiopaque markers within the catheter; and

deploying therapeutic from the catheter to a target site.